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Meta Matters: A Comment on Agatti's Proposal on the Identity of Theoretical Psychology

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ABSTRACT. In a recent paper, Agatti (1993) proposed an identity for theoretical psychology. The present comment argues, first, that Agatti's concept of theory is too narrow to accommodate theoretical psychology in the sense of theory building. It is then pointed out that metapsychology is neglected. In this connection it is finally contended that in psychology, being a so-called 'high-level' science, metapsychology is essential and, hence, that Agatti's concept of theoretical psychology in general is also too narrow.

In a recent paper Agatti (1993) proposed a programmatic view on the identity of theoretical psychology. Systematic conceptions of theoretical psychology being scarce (cf. Baker, Hyland, Rappard, & Staats, 1987; Gergen, 1987), his paper is a welcome contribution. However, as will be argued in this comment, Agatti's perspective is not wide enough to encompass theoretical psychology in its entirety.

Essential to Agatti's concept of theoretical psychology is his view on the relation between philosophy and the special sciences (henceforth I am only interested in the special science of psychology). He rejects the received view which maintains a difference between the respective domains of knowledge. According to Agatti, this view is predicated upon the assumption that psychology has at a certain point in its development left its philosophic parent but remains inferior and will therefore ultimately return to philosophy. The author calls this assumption questionable and, indeed, to my knowledge few psychologists long to see their discipline return to philosophy. The opposite attitude seems prevalent, and this may well explain the hesitant acceptance of much work in theoretical psychology, which, being perceived as 'philosophical', is judged to be inferior because of the very assumption of a difference between the domains of both pursuits.

A Narrow View

In his rejection of this assumption, Agatti proposes that knowledge is derived from the observation of the mental (internal) or the physical (external) world. Observation is identified with experimentation, which can take place in physical contexts or in the mind, where it involves symbol manipulation. Both kinds of experimentation

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are seen to derive from philosophy, by which is meant love of knowledge as distinct from mere opinion. But Agatti also refers to philosophy in a strict sense, namely, the discipline of philosophy. This confusing distinction will not be followed here. Instead, philosophy will simply be understood as the largely academic pursuit bearing that name.

Agatti's view that experimentation is observation finds a parallel in the history of psychology. Among the difficulties faced by Wilhelm Wundt (1832–1920) in developing his approach to experimental psychology was the dichotomy between outer and inner perception. This dichotomy, conceived by Kant, precluded the development of a scientific psychology of consciousness because psychology was assigned the latter domain where, according to Kant, experimentation and mathematics could not be applied. Wundt tried to overcome this difficulty by arguing that the success of physics did not depend on its (external) domain but on its specific way of dealing with observation or experience as the source of all the sciences. Accordingly, physics was assigned a 'mediate' and psychology an 'immediate' perspective on experience. In the Wundtian system both the psychophysical experiment and the historical or descriptive method came down to observation. The experiment entailed direct observation under experimentally controlled conditions, whereas the historical method involved the indirect observation of the mind by way of its objectivation in language. In the latter case there is neither the possibility nor the need to experiment since, according to Wundt, history has already experimented for us (cf. Rappard, 1979). Hence, experimentation is basically observation.

It seems, then, that Agatti holds a dated view of experimentation as only a means to bring to light or demonstrate phenomena of scientific interest. Although Wundt's contemporary, Hermann Ebbinghaus (1850–1909), already introduced a more modern view, continental psychology maintained a demonstration concept of experientation until well into our century (cf. Gestalt psychology, Piaget). Although the experiment may still serve as a demonstration device, even in the natural sciences its primary function is a means to test hypotheses. However, Agatti's view does not seem to have a place for it. His treatment of theory also seems limited. While it is not easy to grasp what exactly is meant by 'ideally fixed individuals' (IFIs) as the result of the 'creative articulation of the data of observation', it can be inferred that theory, so conceived, may perhaps amount to some sort of empirical law.[1] But there seems little room for the unobservable, theoretical entities needed to explain these laws. It is difficult to understand where the explanatory function of theories might be accommodated in Agatti's perspective, nor does it encourage a spelling out of the complementary roles of theorizing and experimentation, as conceived by, for example, Thagard (1988, p. 2), 'with neither dominant'.

The Importance of Metapsychology

The second, and by far the largest, part of this comment will be used to argue that, aside from his views of experimentation and theory, Agatti's concept of theoretical psychology is also too narrow. The inadequacy of his explication of the theoretical pursuit appears in particular from his neglect of metatheory or metapsychology.

From a questionnaire circulated prior to the first conference of the International Society for Theoretical Psychology (ISTP) two broad areas of theoretical concern emerged: theory building and metatheory (Baker et al., 1987, p. v). Henceforth, these two aspects of theoretical psychology will be referred to as *theoretical psychology* and *metapsychology* respectively. When the theoretical endeavour is mentioned in a comprehensive or unspecified sense, theoretical psychology (TP) will be used.

In order to be clear about this distinction, and the relation between the two parts of TP, I will first briefly describe theoretical psychology. Next, the concept of high- and low-level science is introduced. Having accomplished that, the field should be sufficiently prepared to put forward the final argument that in psychology, because it is a high-level science, metapsychology is an essential part of the discipline.

Theoretical Psychology

Apart from psychology, many of the special sciences, such as physics, biology and sociology, show a division of labour between empirical and theoretical research. In this comment, however, only physics will be mentioned.

According to the theoretical physicist Trainor (1985), experimental physics deals with the taking of measurements, whereas theoretical physicists are mostly concerned with formulating the explanatory backgrounds of these measurements in the form of mathematical equations:

> Some physicists prefer the earthy experience of designing apparatus and using it in a sophisticated measuring situation, while others prefer to work abstractly with ideas and their mathematical expression. This concrete-to-abstract spectrum extends from architects and engineers at one limit, through practical experimenters, theoretical physicists, to mathematicians or philosophers at the other. (p. 1226)

As can be gathered from this brief quotation, the task of theoretical physics is basically to construct theory. Hence, even if physics and psychology are different in many respects, both have their theoretical province.

Scheerer (1993) has pointed out that in the 1920s and 1930s German psychologists introduced a concept of theoretical psychology that was analogous to theoretical physics. In fact, around 1880 Wundt had already suggested such a view when using the example of physics in distinguishing between description and explanation as the tasks of experimental and theoretical physics respectively. But since such a division of labour was not feasible in psychology at the time, it was dropped. Forty years on, however, psychologists Pauli and Lindworsky advanced a similar view. In 1920 Pauli (quoted by Scheerer, 1993, pp. 49–50) called for a 'theoretical discipline proper to psychology'. Because psychology had its theoretical concepts borrowed from philosophy, the new endeavour was to 'systematically elaborate the various theories and the explanatory principles contained in them'. Lindworsky drew an explicit parallel between theoretical psychology and theoretical physics. In his view, empirical and theoretical research have the same subject-matter. While the former deals with separate subdomains, theoretical psychology was to concern itself with 'the uniform lawful relations found among the most diverse phenomena, in order to unite those phenomena which follow the same laws wherever they are found' (Lindworsky, 1934; quoted in Scheerer, 1993, p. 50).

Koch's (1951) programme may also be seen as a draft for theoretical psychology in the sense of theory building. Although methodological or foundational problems were mentioned as part of the programme, this did not mean that Koch had primarily metapsychology (see below) in mind. Other points, such as internal systematization and differential analysis of extant theories, are subservient to further theory construction. When asked about the origin of the concept of theoretical psychology it took a moment for the question to sink in. 'What do you mean, "where does theoretical psychology come from?" In the grand days of theoretical behaviorism, psychology simply *was* theoretical psychology,' Koch (personal communication, 27 June 1991) then answered.

In short, just as the theoretical branch of physics, theoretical psychology is concerned with 'theory construction and theory testing' (Hyland, 1981, p. viii), and tends to pursue this task at a more abstract level than the subdisciplines that make up the field. Indeed, the theoretician must be able 'to see the forest as well as the trees' (Trainor, 1985, p. 1227). Even if theoretical psychology thus appears to aim at a degree of generality that at first sight is similar to that of Agatti's TP, the theory concept of most theoretical psychologists seems rather different than his 'ideally fixed individuals' (IFIs).

High-Level and Low-Level Science

Many psychologists assume a stratified structure of the discipline. Elsewhere, I have suggested that psychological levels may be conceived of as ordered along a continuum of narrow-to-wide interactions or contexts (Rappard, 1995a). By context is meant the relevant behavioural context assumed by a psychological method. Context designates the totality of the constraints on the behaviour-as-studied. That is, from a low-level perspective, behaviour (e.g. reflexes) is approached as relatively context independent or unconstrained. For instance, when playing chess, the behavioural context of the players is basically determined by the rules of the game. Within the context of these constraints the moves may, in principle, be predicted from the desire of the players to win the match. However, should one of the players be unfamiliar with the rules and, say, use a pawn as a knight, her or his chess-playing behaviour would be virtually unconstrained, that is, (chess) context free. In terms of Dennett's (1981) treatment of the intentional stance, the behaviour of well-constrained players who are eager to win may be called rational or intentional. The intentional stance is roughly equivalent to what in this paper is called a high level of psychology. But the chess-playing behaviour can also be approached from the physical stance. At that level, it is considered by Dennett to be accomplished by a great many homunculi who are so stupid that they may be replaced by a machine. The homunculi are called stupid since their behaviour is thoroughly decontextualized. At the low level of the physical stance, the homunculi are not constrained by any knowledge of the chess context or rules because, as Dennett (1981) put it, 'all they have to do is remember whether to say yes or no when asked' (p. 124).

While some authors ascribe to psychology a stratified structure, according to other writers the same view is applicable to the entire system of the sciences. For the purposes of this paper it may suffice to note that the interrelation between the sciences that are most often mentioned in such views (physics, biology and psychology) can, generally speaking, be approached along similar lines as indicated

with regard to the intentional and physical levels. That is, these sciences may be situated on a continuum of relative lack of constraints, hence context freedom to highly constrained context dependence. Compared to the domain of low-level sciences '[h]uman behavior is subject to additional constraints and the order to be found in human behavior can be properly understood, only if we take these additional constraints properly into account' (Toulmin, 1972, p. 416). Within the context of the present paper, psychology must be called a context-dependent science. The example of the chess game can, of course, serve only as a limited illustration because the contextuality of human behaviour in general is, compared to chess, enormously widened by its societal and historical dimensions.

Metapsychology Matters

What bearing does the high-level status of our discipline as indicated above have on the place of metapsychology in theoretical psychology in general (TP)? To answer this question I will take as my starting-point a brief paraphrase of a line of reasoning on which Gergen (1987) urged the necessity of metapsychology.

Gergen began by training his sights on what is called in this paper the low-level orientation of logical positivism. This orientation appears from the central tenet of verificationalism, that is, the principle that the meaning of a sentence rests on its verification through sensory experience. Positivism assumed that the empirical foundations of science were context independent, and the correspondence between observational terms and theoretical terms was conceived of as remaining invariant regardless of context. Even if this programme soon proved unfeasible and was watered down as positivism entered its conformationalist period, the basic distrust of contextuality did not mellow.

Although positivism is still a strong force in North American psychology, it is no longer dominant in the philosophy of science. And although it is difficult to tell which philosophy, if any, currently enjoys dominance, the ideal of context independence has lost its appeal in wide segments of the discipline. I do not think that the contextuality argument must perforce take one all the way to social constructionism, but it is not difficult to agree with Gergen (1987) that the upshot of the new philosophies of science is 'that psychological theories are relatively unconstrained by the nature of the world' (p. 19). But then, what does constrain theories in such a high-level science? It is my contention that implicit in Gergen's argument is an answer to this question that goes a step further than does the author himself. The answer is that psychological theories are basically constrained by the conceptual contexts provided by philosophy. After all, Gergen's view that certain (post-positivistic) developments in philosophy necessitate a new perspective on psychology would seem to entail that earlier (positivistic) philosophy also brought with it a certain view on the field. In the latter case, however, this was a context-independent view, which is currently being substituted for a different concept offering more room for various approaches to the contextuality of human behaviour.

When speaking of philosophy as the context of psychological developments, 'context' is used in a more comprehensive and formal sense than it is by Gergen. But this does not, of course, preclude a more specific use of the concept, as in his plea for a metapsychology rooted in social constructionism, which finds much of its conceptual context in ordinary-language philosophy and post-structuralism.

The broad movement of cognitive psychology is also highly contextualized by philosophy—perhaps, even to a higher degree than social constructionism. According to Haselager (1995), classical cognitive science or GOFAI and neurocomputationalism can be conceived of as 'empirical extensions' of Fodor's intentional realism and Churchland's eliminative materialism, respectively. As Holland, Holyoak, Nisbett and Thagard (1986) observed, 'central problems in the philosophy of science are continuous with key issues in cognitive psychology and artificial intelligence' (p. 335).

In view of its philosophical contextualization, of which Pauli, mentioned above, was already well aware, it can be concluded that, conceptually speaking, the discipline is *not*—using once more a Gergenian phrase—'stable across varying contexts' (Gergen, 1987, p. 4). And this conceptual instability or variation entails a cogent argument for metapsychology, that is, a discipline which deals with conceptual or foundational problems. Such problems are typically dealt with by philosophy, but over the past few decades the social sciences and literary theory have also contributed fundamental concepts and perspectives. History should be mentioned in particular, because '[t]he history of psychology serves to focus [fundamental] issues better than any other approach in our subject' (Helson, 1972, p. 116). As argued elsewhere (Rappard, 1995b), because of psychology's conceptual variation the relation between the discipline and its history is basically similar to that of philosophy. Hence, the historiography of fundamental concepts (*Problemgeschichte*) is part and parcel of metapsychology (Rappard, 1990, 1993a). Against this background it is not surprising to find history courses in the psychology curriculum in most countries.

Metapsychology differs from empirical psychology in that it asks, among other questions, 'what issues have been overlooked, what problems interfere in the way the question has been asked, and what is likely to result if inquiry continues its present course?' (Stam, Rogers, & Gergen, 1987, p. xiii). Clearly, metapsychology is ultimately guided by a broad methodological interest. Foundational work is not taken on for its own sake but in order to advance the discipline. As appeared from the programmatic views of theoretical psychology and metapsychology mentioned earlier, it does not make very much sense to try to draw neat boundaries between empirical, theoretical and metatheoretical work (cf. Rakover, 1990; Rappard, 1993b). The philosophical metacontext within which a psychologist pursues her or his research makes a difference. Whether one works within, broadly speaking, the received view or a hermeneutical perspective determines, for instance, what can be accepted as data and how these may be collected and processed; it determines the answer to questions concerning the nature of theory and the possibility to deduce testable hypotheses concerning the types of explanation, and so on.

And it is at this point that an essential difference may be observed between high- and low-level science. Metatheoretical discussions do not only take place in the former. They can be found just as well in the natural sciences, but in this case such discussions are *about* rather than *part of* the science concerned. The discussions taking place in physics between, for instance, positivists and realists have a bearing on the function of theories in these sciences. Positivists stress the predictive function whereas realists tend to underscore the explanatory and unifying functions of theory. Moreover, problems concerning the interpretation of quantum-mechanical formalisms have led to various schools, but, in marked difference from psychology, such quarrels do not affect empirical research (Kroes, 1987). The philosophical work mentioned by Trainor (above) can be thought of as an extension of

theory building—not 'meta-physics'. As has been said, metatheoretical discussions concerning this low-level field take place *about* but not *within* the science. This can be seen when visiting the libraries of a physics and a psychology department. In the latter a great many foundational studies, crisis proclamations and programmes towards alternative approaches can be found, but there are none in the physics library. History and systems courses are not to be found on the physics curriculum. In short, low-level science has been decontextualized. The history of psychology, on the other hand, could be conveniently summarized as a series of attempts at decontextualization, along with the alternative approaches developed to ward them off (Eisenga & Rappard, 1987). At this point in this apparently continuous story one may agree with Margolis (1986) that psychology 'cannot be committed to the pursuit of fundamental phenomena and processes, in the sense of "fundamental" suited to the physical sciences' (p. 34).

One reason why the philosophical context of high-level science has a direct bearing on its practice may well be the tension between the (behavioural) contextuality of its domain, on the one hand, and its culturally mandated low-level orientation, on the other. In a sense, then, the behavioural and the philosophical contextuality of the discipline are interlinked.

Conclusion

A large part of this comment has been used to argue that in psychology, because it is a high-level science, metapsychological concerns are part and parcel of the field. In other words, metapsychology matters.

Writing on theoretical psychology, metapsychology should therefore not be neglected. Since Agatti did neglect metapsychology, and also because of his narrow view on theory and theory building, it must be concluded that his proposal on the identity of theoretical psychology falls short on essential points.

Note

1. If I read Agatti correctly, 'ideally fixed individuals' are to be understood as kinds of concrete concepts. Agatti distinguishes between concrete and general concepts. The latter, for example, animal, refer to a greater number of individuals than the former, say, dog. Concrete concepts (on the other hand) refer to concrete individuals, for example, dog, but also to conceptual or ideal objects like 'things imagined, and forms of possible being such as "relation" '. An IFI, Agatti (1993) writes, is not a general concept but an 'ideally fixed individual, which is a model from which to explore the world. Theoretical progress is the result of determining IFI's (read concepts) or complex IFI's or concepts, such as models, laws and theories' (pp. 391–392).

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